SOUTHERN CALIFORNIA

ASSOCIATION of GOVERNMENTS

Main Office

818 West Seventh Street

12th Floor

Los Angeles, California

90017-3435

t (213) 236-1800

f (213) 236-1825

www.scag.ca.gov

MEETING OF THE

TRANSPORTATION CONFORMITY WORKING GROUP COMMITTEE

Tuesday, October 25, 2005
10:00 a.m. – 12:00 p.m.

SCAG Offices
818 W. 7th Street, 12th Floor
Riverside A Conference Room
Los Angeles, California 90017
213.236.1800

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Ted Harris at 213.236.1916 or harrist@scag.ca.gov

115383

SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation in order to participate in this meeting. If you require such assistance, please contact SCAG at (213) 236-1868 at least 72 hours in advance of the meeting to enable SCAG to make reasonable arrangements. To request documents related to this document in an alternative format, please contact (213) 236-1868.

TRANSPORTATION CONFORMITY WORKING GROUP
INTERAGENCY CONSULTATION
AGENDA

			PAGE #	TIME
1.0	CALL TO ORDER	**Ty Schuiling, SANBAG**		
2.0	WELCOME AND INTRODUCTIONS	**Ty Schuiling, SANBAG**		
3.0	PUBLIC COMMENT PERIOD **Members of the public desiring to speak on an agenda item or items not on the agenda, but within the purview of this committee, must fill out a speaker's card prior to speaking and submit it to the Staff Assistant. A speaker's card must be turned in before the meeting is called to order. Comments will be limited to three minutes.**			
4.0	CHAIR'S REPORT	**Ty Schuiling, SANBAG**		
5.0	ACTION ITEMS			
5.1	Approval of the September 22, 2005 Meeting Summary **Attachment**	**Ty Schuiling, SANBAG**	1	
6.0	INFORMATION ITEMS			
6.1	RTIP Update	**Rosemary Ayala, SCAG**		10 minutes
6.2	RTP Update	**Naresh Amatya, SCAG**		10 minutes
6.3	Centerline Update **Attachment**	**Paul Taylor, OCTA**	3	15 minutes
6.4	TCM Update	**Jessica Kirchner, SCAG**		5 minutes

TRANSPORTATION CONFORMITY WORKING GROUP
INTERAGENCY CONSULTATION
AGENDA

			PAGE #	TIME
6.0	**INFORMATION ITEMS CONT/D**			
6.5	2007 AQMP Update	**SCAQMD**		5 minutes
6.6	Reauthorization Guidance	**FHWA**		5 minutes
6.8	PM 2.5 Conformity Process **Attachment**	**Ted Harris, SCAG**	**30**	15 minutes
6.9	Information Sharing	**Group Discussion**		
7.0	**ADJOURNMENT**	**Ty Schuiling, SANBAG**		

The next Transportation Conformity Working Group meeting is currently scheduled for Tuesday, November 22, 2005 at SCAG offices.

Please provide 30 copies of materials you would like to distribute at the meeting. If you have any questions, please contact Ted Harris at (213) 236-1916 or harrist@scag.ca.gov.

Conference call number 877.546.1574, code #14263

Transportation Conformity Working Group
Interagency Consultation
Meeting Summary

Thursday, September 22, 2005
3:00 – 4:30 PM

Southern California Association of Governments
818 W 7th Street, 12th Floor
Los Angeles, CA 90017
Riverside 'A' Conference Room

The following minutes are intended to summarize the matters discussed.
Due to technical difficulties there is no audio recording of the meeting available for review.

1.0 CALL TO ORDER

The meeting was called to order at 3:04 PM by Ty Schuiling, SANBAG

2.0 WELCOME AND SELF-INTRODUCTIONS

ATTENDANCE:

In Person:

Naresh Amatya, SCAG
Grace Balmir, FHWA/FTA
Herman Cheng, MTA
Ashad Hamideh, MTA
Ted Harris, SCAG
Jessica Kirchner, SCAG
Anup Kulkarni, OCTA
Nancy Marroquin, MTA
Jean Mazur, FHWA
Sylvia Patsaourus, SCAG
Ty Schuiling, SANBAG
Eyvonne Sells, AQMD
Arnie Sherwood, ITS/UCB
Paul Taylor, OCTA
Carla Walecka, TCA
Leann Williams, Caltrans

Via Teleconference:

Mike Brady, Caltrans Headquarters
Joe Cassmassi, SCAQMD
Paul Fagan, Caltrans District 8
Sandy Johnson, Caltrans District 11
Lisa Poe, SANBAG
Dennis Wade, ARB

2.0 PUBLIC COMMENT PERIOD

There were no public comments at this meeting.

4.0 CHAIR'S REPORT

There was no report at this time.

5.0 ACTION ITEMS

5.1 Approval of the August 23, 2005 Meeting Summary

It was noted that on page 4, third complete paragraph, it was pointed out that there was an error in the second sentence where it stated that SAFETEA-LU is raising the importance of CMS and its consistency with the intent of federal rules. Additionally, on page 4, fourth complete paragraph, it was pointed out that second sentence did not make sense and should be deleted. On page 5, Item 6.5, it was noted that there was a typo in the third paragraph. On page 6, the second paragraph had a couple of minor typos.

With these corrections noted, motion was made to approve the minutes with the amendments, then unanimously approved.

6.0 INFORMATION ITEMS

6.1 TCM Replacement (Paul Taylor, OCTA)

Mr. Paul Taylor, OCTA, gave a presentation on OCTA's plan to replace two committed TCMs with new TCM projects that provided greater or equivalent emission reductions. The Centerline program will be replaced by a 28-mile mixed flow Bus Rapid Transit from the Brea Mall to Irvine Transportation Center, Metrolink service expansion enhancing service between the Inland Empire and Orange County, Irvine Business Center Shuttle, and free 3+ HOV on the Express Lanes, from SR 55 to the Orange County/Riverside County line. The Yorba Linda Station project will be replaced with the Fullerton Station Parking Structure project.

6.2 2007 AQMP Update (Eyvonne Sells, SCAQMD)

There was no update at this time. The update was given at the Statewide Transportation Conformity Working Group meeting held earlier in the day at the SCAG office.

6.3 TCM Update (Ted Harris, SCAG)

Mr. Ted Harris, SCAG, presented a review of the TCM matrixes. The matrixes included committed TCMs by County, TCMs by County that needed additional information, and TCM's that were originally listed and turned out to not be actual TCMs.

6.4 Information Sharing (Group Discussion)

Ms. Grace Balmir, FHWA/FTA, discussed the Certification Revision Report and Baseline Tier II. Ms. Jean Mazur, FHWA, discussed the NEPA approval process.

7.0 ADJOURNMENT

The meeting adjourned at 3:45 PM. The next meeting of the TCWG will be on Tuesday, October 25th at the SCAG offices.

OCTA

AFFILIATED AGENCIES

Orange County Transit District

Local Transportation Authority

Service Authority for Freeway Emergencies

Consolidated Transportation Service Agency

Congestion Management Agency

Service Authority for Abandoned Vehicles

October 18, 2005

Mr. Mark Pisano
Executive Director
Southern California Association of Governments
818 West Seventh Street, 12th floor
Los Angeles, CA 90017

Dear Mr. Pisano,

On October 14, 2005, the Orange County Transportation Authority (OCTA) Board of Directors approved the replacement of CenterLine and the Yorba Linda Station projects with substitute Transportation Control Measures (TCMs). The Board of Directors requests that the Southern California Association of Governments (SCAG) prepare and approve a Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) amendment to formally replace the CenterLine and Yorba Linda Station projects with the substitute TCMs for final Federal Highway Administration approval. Timely completion of the amendment by April 2006 is requested to meet deadlines for reallocating funds to the new TCMs.

In compliance with the South Coast Air Basin Air Quality State Implementation Plan's (SIP's) federally-approved requirements for substituting TCMs, OCTA staff worked closely with SCAG staff to define substitutes for the two projects:

1) The 8-mile Centerline light rail TCM will be replaced with a combination of four projects:

   - 28-mile mixed-flow Bus Rapid Transit from Brea Mall to Irvine Transportation Center
   - Metrolink Service expansion providing enhanced service between the Inland Empire and Orange County
   - Irvine Business Center shuttle connecting John Wayne Airport to Irvine Business Center
   - Free 3+ HOV on the 91 Express Lanes, from State Route 55 to the Orange County/Riverside County line.

2) The Yorba Linda TCM will be replaced with the Fullerton Station Parking Structure project.

OCTA staff has documented the countywide emissions impacts of the substitute projects and concluded that the replacement projects provide equal or greater emission reductions within the same timeframe and geographic area as the original TCMs. SCAG staff has reviewed the methodology OCTA used for the analysis and concurs with it.

OCTA also fulfilled the interagency consultation requirement for TCM substitution. OCTA management presented the proposed TCM substitution to the Transportation Conformity Working Group on July 26, and September 22, 2005, and will return on October 25, 2005, to report on the OCTA Board of Director's final action.

OCTA's Board of Directors and management appreciates SCAG's timely approval and processing of the RTP and RTIP amendment to incorporate this substitution.

Sincerely,

Arthur T. Leahy
Chief Executive Officer

ATL:pt
Attachment: Orange County Transportation Control Replacement Report

Orange County Transportation Control Measure Replacement

Presented to

Southern California Association of Governments

Submitted by

Orange County Transportation Authority
550 South Main Street
Orange, CA 92863

October 18, 2005

Orange County Transportation Control Measure Replacement

I Introduction

Orange County Transportation Authority plans to replace two existing Transportation Control Measures (TCMs) with new TCM projects that together provide equivalent or greater emission reductions, while meeting all TCM substitution requirements specified in Appendix IV-C of the l994 and 2003 South Coast Air Quality Management Plan/State Implementation Plan.

Two independent replacements will be discussed in this technical report:

CenterLine. Replace the 8-mile CenterLine light rail project with a combination of four projects. :

- 28-mile mixed flow Bus Rapid Transit from Brea Mall to Irvine Transportation Center
- Metrolink Service expansion providing enhanced service between the Inland Empire and Orange County
- Irvine Business Center Shuttle connecting John Wayne Airport to Irvine Business Center
- Free 3+ HOV on the 91 Express Lanes, from SR 55 to the Orange County/Riverside County line.

Yorba Linda Station. Replace the Yorba Linda Station project as a TCM with the Fullerton Station Parking Structure project.

The following report presents the criteria for TCM replacement that apply to CenterLine and the Yorba Linda Station TCMs. Further the report includes a description of each TCM project to be replaced, the need for replacement, the implication of the replacement on the Regional Transportation Plan and Regional Transportation Improvement Program, and a description of the proposed replacement project. The technical analysis for each replacement presents emissions data for the original and replacement TCMs.

II TCM Replacement Procedures and Requirements

Replacement of CenterLine and Yorba Linda Station with new TCMs must follow the substitution protocol specified in the federally-approved Air Quality Management Plan/State Implementation Plan (AQMP/SIP).

Transportation Control Measures are contained in Appendix IV-C of the AQMP/SIP. The TCM replacement process is also spelled out in this appendix to the l994, l997 and 2003 AQMPs; USEPA formally approved the replacement process in the l994 AQMP/SIP.

The TCM Replacement section describes the circumstances in which TCM's must be replaced: "a specific TCM project may be found to be non-implementable within the designated time frame and a new TCM project is substituted. The AQMP specifies procedures for replacing individual projects such as CenterLine and the Yorba Linda Metrolink Station:

- The CTCs and/or project sponsors shall notify SCAG when a TCM project cannot be delivered or will be significantly delayed.

- SCAG, CTC or project sponsor can propose a substitute measure.

- Prior to adopting an individual TCM substitution, the measure must have been subject to interagency consultation (via the Transportation Conformity Working Group), public review and comment period and emissions analysis.

- The replacement measure must be subject to the SCAG Regional Council review and adoption.

- Upon adoption by the Regional Council, the new measure will replace the previous measure and will be incorporated into the RTIP through an administrative amendment.

- Adoption by SCAG's Regional Council will rescind the previous TCM and apply the new measures.

Proposed replacement projects must also meet specific criteria:

- The substitution of an individual measure must provide equivalent or greater emissions reductions than the measure being replaced in the AQMP/SIP.

- The substituted measure should preferably be located in the same geographic area and serve the same demographic subpopulation as the TCM it is replacing.

- A substitute measure must be fully funded and implemented in the time frame established for the measure contained in the SIP.

- The substitute measure must be fully implemented within two years of the implementation date of the original measure in order to meet the test for a finding of timely implementation.

- There must be evidence of adequate authority under State or local law to implement and enforce the measures.

- Commitments to implement the substitute measures must be made by the agency with authority for implementation.

- The analysis of replacement measures must be consistent with the methodology used for evaluating measures in the Air Plan.

- Where emissions models and/or transportation models have changed since those used for purposes of evaluating measures in the attainment plan, both the previous TCM and the new TCM shall be evaluated using the latest planning assumptions and modeling techniques in order to demonstrate consistency with the current Air Plan .

Sections III and IV of this report include summaries of the CenterLine and Yorba Linda Station replacement TCMs' fit with each of the requirements established by the AQMP.

III CenterLine TCM Replacement

CenterLine TCM Description

On October 22, 2001, the OCTA Board of Directors approved an 18-mile CenterLine rail transit alignment between the Irvine Transit Center and the Santa Ana Regional Transportation Center.

On July 21, 2003, the OCTA Board of Directors reduced the Locally Approved Alternative project length to 8 miles. The 10-mile segment of CenterLine was formally replaced by three projects that together provide equivalent emission reductions within the same timeframe and geographic area. The replacement project package consisted of

- An 8-mile CenterLine project connecting John Wayne Airport and Santa Ana Transit Center/Metrolink-Amtrak Station;
- Intracounty rail services to cover the area where the 10-mile CenterLine segment was deleted; and
- Upgraded bus service providing 402 new weekday bus trips in the deleted portion of the CenterLine corridor, including runs from John Wayne Airport to UC Irvine.

This replacement was completed after interagency consultation with federal, state and local agencies through SCAG's Transportation Conformity Working Group. SCAG's longrange Regional Transportation Plan (RTP) and six-year Regional Transportation Improvement Program (RTIP) were revised accordingly and approved by the Federal Highway Administration.

Thus, the current CenterLine project in the RTP and RTIP is an 8-mile portion of the original 18-mile light rail line TCM from John Wayne Airport to the Santa Ana Transit Center. The CenterLine project alignment is indicated on Maps 1 and 2.

Need for CenterLine Replacement. The 8-mile CenterLine project is designated as a Transportation Control Measure (TCM) in the 2003 Air Quality Management Plan. As a TCM, the commitment to build CenterLine by 2010 can be eliminated only if projects with equivalent emission reduction benefit replace it in the RTP, RTIP and AQMP.

CenterLine must be replaced at this time because funding shortfalls prevent the project and its emission benefits from being delivered by 2010 as required by the AQMP. CenterLine funding is drawn from three sources: Orange County's 1/2-cent sales tax, Measure M, which provided seed money for a "starter system, " and state and federal funding.

OCTA sought federal appropriations for CenterLine in FY 2004/2005. Given the prospect of a lack of a federal funding commitment essential to delivering the project, in February 2005, the OCTA Board paused CenterLine implementation in order to identify and study options for replacing CenterLine. Again, OCTA sought FY 2005/2006 funding through SAFETEA-LU, but the federal transportation bill was ultimately approved without a CenterLine funding earmark.

While the state funding earmark was obtained, anticipated federal funding for the CenterLine project has not been, and will not be, forthcoming in a timeframe that allows delivery of the project and associated emission reductions by 2010 as required by the AQMP.

Therefore, the OCTA Board formally directed staff to pursue alternatives to CenterLine, and to identify substitute projects that meet the criteria for TCM replacement spelled out in the AQMP. In addition, the Board directed that replacement projects be constrained with funds under OCTA's control to insure delivery of the replacement projects by 2010.

Failure to replace the CenterLine project would lead to a lapse in timely implementation of TCM-01, which in turn would jeopardize continued federal approvals and funding for all other projects in the RTP and RTIP.

Implications of CenterLine Replacement for 2004 RTP and 2004 RTIP. At present, the 8-mile CenterLine project is included in the 2004 Regional Transportation Plan and 2004 RTIP as follows:

ORA 194	Central Orange County Fixed guideway (CenterLine) for construction from Santa Ana Transportation Center to John Wayne Airport. Includes rolling stock for Initial operating segment.

At the conclusion of the interagency consultation process, OCTA will request that SCAG amend the 2004 RTP and 2004 RTIP to remove the remaining CenterLine project description, and designate the replacement projects as TCMs. OCTA will submit the appropriate changes to SCAG by October 20, 2005, for inclusion in 2004 RTP/RTIP. The replacement projects will be carried forward into the 2007 RTP update now being developed by SCAG.

The replacement projects will also subsequently be included in annual TCM Timely Implementation Reports that SCAG submits to FHWA to demonstrate that the projects are being implemented on time in fulfillment of the AQMP TCM requirements.

CenterLine Replacement Project Identification. Working with the OCTA Board's Transit Planning and Operations Committee, OCTA staff has analyzed thirty-four potential replacement projects with the potential to provide equivalent or greater emission reductions than the CenterLine and Yorba Linda Station projects. The options include:

- The current project, the 8-mile CenterLine alignment between John Wayne Airport and Santa Ana Transit Center/Metrolink-Amtrak Station.

- Other light transit rail

- Bus Rapid Transit, expanding the BRT system from two current lines to three or more lines.

- Commuter rail, increasing Metrolink service frequency and/or new locations.

- Gateways to regional connections, including the MagLev system, California High Speed Rail, and the California/Nevada High Speed Train

- Other transit projects, such as additional investment in the OCTA bus system

- Road projects. and

- 3+ HOV requirements for the 91 Express Lanes.

During six work sessions, the Board's Transit Planning and Operations Committee determined that no single replacement project was available. The Committee investigated six "packages" of projects with the potential to replace CenterLine. The Committee also defined a seventh package of projects for further analysis that included countywide Bus Rapid Transit; increasing Metrolink service; and high speed rail and MagLev system investments.

Recommended CenterLine Replacement Project Package

OCTA requests that the 8-mile CenterLine TCM be replaced with a package of four projects that meet the TCM replacement criteria set in the AQMP/SIP. All three capital projects are currently included in the 2004 conforming RTP. Although each project meets the eligibility criteria for TCM status, none is currently designated as a TCM. The replacement projects are indicated on Maps 1 and 2, along with the CenterLine alignment.

Bus Rapid Transit. This project provides a 28-mile BRT line extending from Brea Mall to Irvine Transportation Center. This line follows portions of the original CenterLine alignment, and builds on the existing BRT network in Orange County. The BRT project will cost $36.9 million for structures and rolling stock.

Metrolink Service Expansion. This project provides enhanced service on Orange Inland Empire –Orange County line and 91 line, and will cost $197 million.

Irvine Business Center Shuttle. CNG-fueled shuttle vehicles will connect John Wayne Airport to Irvine Business Center, one of the County's and the region's major employment concentrations. The project will cost $12.3 million.

Free 3+ HOV on the 91 Express Lanes. Free access to the 91 Express toll lanes will be provided to 3+ carpools, from SR 55 to the Orange County/Riverside County line. The 91 Express Lanes relieve congestion on one of the most impacted freeways in the Southern California region. This operational change will not require any capital investment.

Technical Analysis

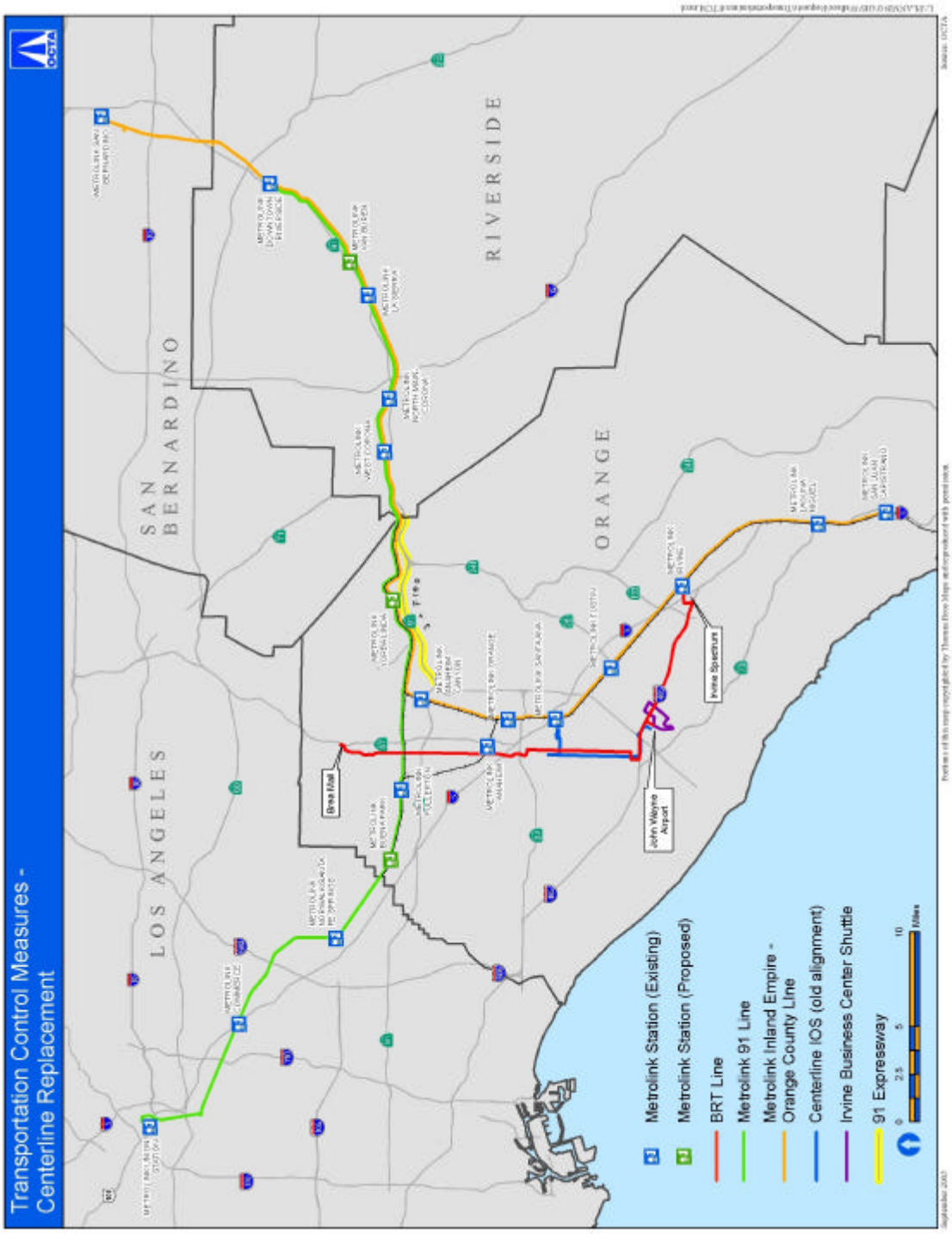
This technical analysis documents the evidence that the CenterLine replacement TCM meets the substitution criteria spelled out in the AQMP/SIP: equivalent emissions, similar geographic service area, similar implementation schedule, and demonstrated financial commitment to complete the project on time.

Methodology for Analyzing Original Project and Replacement The air quality impacts of the 8-mile CenterLine TCM were compared with the proposed TCM Replacement projects using a 2-step method based on SCAG's emissions program focused on Orange County. OCTA's OCTAM 3.2 travel demand model, which is consistent with SCAG's regional model, provided travel information on the CenterLine and replacement TCMs.

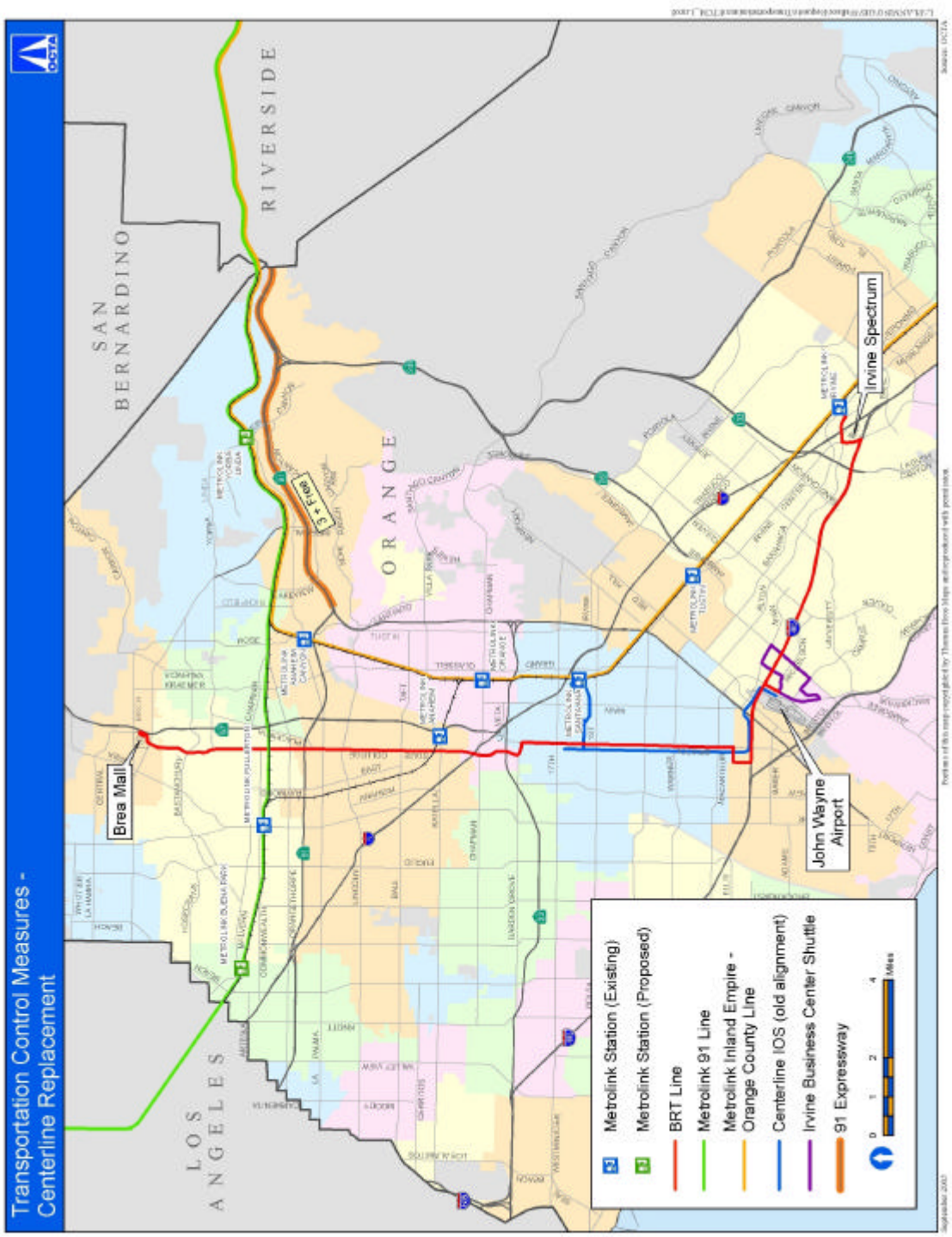
Step 1: Obtain daily vehicle miles traveled (VMT) and speed data for freeways, arterials and transit bus from OCTAM 3.2. Extract all loaded link information, intrazonal travel speeds, and intrazonal travel volumes for all modeled time periods.

Step 2**:** Run SCAG emissions program using the extracted information from Step 1 as input to obtain vehicle starts, VMT, and vehicle population data. The result of this program is an EMFAC2002 input file for Orange County reflecting the model run. This program outputs emissions exhaust for ROG, NOx, CO and PM-10 pollutants by running EMFAC 2002. The additional emissions resulting from added bus and train service as part of each alternative are calculated and included in the overall emissions estimates. The modeling assumes that 2010 intracounty train equipment will be ultra-low emission diesel engines and average 35-45 mph while the bus equipment will be clean natural gas engines and average 25-35 mph.

Map 1


Transportation Control Measures -
Centerline Replacement
LOS ANGELES
SAN BERNARDINO
RIVERSIDE
ORANGE
Irvine Spectrum
John Wayne Airport
Metrolink Station (Existing)
Metrolink Station (Proposed)
BRT Line
Metrolink 91 Line
Metrolink Inland Empire - Orange County Line
Centerline IOS (old alignment)
Irvine Business Center Shuttle
91 Expressway
0
2.5
5
10
Miles

Map 2


Transportation Control Measures -
Centerline Replacement
SAN BERNARDINO
RIVERSIDE
ORANGE
LOS ANGELES
Brea Mall
Irvine Spectrum
John Wayne Airport
Metrolink Station (Existing)
Metrolink Station (Proposed)
BRT Line
Metrolink 91 Line
Metrolink Inland Empire - Orange County Line
Centerline IOS (old alignment)
Irvine Business Center Shuttle
91 Expressway

Emission Analysis. Based on the results of the modeling described above, Tables 1 and 2 compare the CenterLine TCM and proposed replacement TCM projects total emissions for 2010 and 2030. The emissions data demonstrate that the replacement project package provides equivalent or greater emission reductions for Orange County than the current CenterLine project.

Geographic Area/Service Area/Accessibility. The 8-mile CenterLine TCM provided intra-county light rail service between John Wayne Airport/Irvine and Santa Ana Regional Transportation Center. Map 1 depicts the service area of the CenterLine TCM and the proposed Replacement TCM projects.

The replacement Bus Rapid Transit (BRT) route parallels and intersects the original CenterLine alignment, providing accessibility to the same population in the same service area as CenterLine. By expanding BRT routes, the replacement TCM provides an even greater level of connectivity with existing bus and Bus Rapid Transit routes than CenterLine. 8-minute BRT headways are consistent with those for CenterLine.

Metrolink service will provide expanded accessibility to and from jobs in Orange County. The expanded Orange County-Riverside County service will reduce congestion on all routes carrying Inland Empire commuters to Orange County jobs.

The CenterLine corridor traversed an area rich in housing to connect major business concentrations in downtown Santa Ana and Irvine including John Wayne Airport, Irvine industrial area north of the airport, and Irvine Business Center. The Replacement TCM projects also serve the cities of Irvine, Tustin and Santa Ana as well as greater Orange County. In the City of Santa Ana, the project corridor serves an area with median income below $35,000. In Tustin and Irvine, median income is above $60,000. Lower income Santa Ana residents have good access to job rich areas using either the BRT or Metrolink improvements included in the Replacement TCM.

Implementation Schedule. The replacement projects are all programmed for delivery by 2010, the date when CenterLine would have been open for service.

Table 1
2010 Comparison of CenterLine TCM and Replacement TCM:
Boardings and Countywide Total Exhaust Emissions (tons per day)
2010

	CenterLine TCM	Replacement TCM
Daily Boardings	**265,921**	**266,313**
ROG	**33.32**	**33.30**
CO	**297.77**	**297.55**
NOx	**63.45**	**63.44**
PM-10	**30.78**	**30.78**

Table 2
2030 Comparison of CenterLine TCM and Replacement TCM:
Boardings and Countywide Total Exhaust Emissions (tons per day)

	CenterLine TCM	Replacement TCM
Daily Boardings	**379, 887**	**380,447**
ROG	**16.59**	**16.58**
CO	**113.12**	**113.03**
NOx	**18.74**	**18.73**
PM-10	**43.34**	**43.34**

Financial Commitment. The replacement TCM projects will require a total of $246.2 million. OCTA has programmed $465 million of Measure M sales tax funds for the CenterLine project. A portion of Measure M funds will now be reallocated from CenterLine to the replacement TCM projects.

Summary of CenterLine Replacement Project Fit with Required Replacement Procedures and Criteria

- **SCAG Review and Adoption.** The replacement TCM will be presented to SCAG's Transportation and Communications Committee for its recommendation on November 3, 2005. The Committee will make its recommendation on the replacement for SCAG's Regional Council adoption on November 3, 2005.

- **Interagency Consultation.** Interagency consultation is occurring at SCAG's publicly noticed Transportation Conformity Working Group meetings on July 26 and September 22, 2005. A final report on the status of interagency consultation will occur on October 25, 2005.

- **Equivalent Emission Reductions.** The four replacement projects provide equivalent or greater emission reductions for ROG, NOx, CO and PM-10 as presented in Tables 1 and 2.

- **Similar Geographic Area.** The replacement projects serve Orange County and provide accessibility in the same corridor as the original TCM. Improved BRT and Metrolink headways benefit the entire County.

- **Full Funding**. The $246.2 million package of replacement projects will be fully funded with Measure M revenues currently programmed for the CenterLine project.

- **Similar Time Frame.** Like the original CenterLine TCM, the replacement projects will be completed and in operation by 2010.

- **Timely Implementation.** The replacement projects will be included in annual TCM Timely Implementation Reports that SCAG submits to FHWA.

- **Legal Authority.** OCTA has full legal authority to construct and operate the replacement projects; OCTA owns the bus fleet, and owns the Metrolink track, rolling stock and station infrastructure.

- **Implementation Commitment**. Some of the replacement projects are already committed to in the 2004 RTP/RTIP. The remaining projects will be added to the RTP/RTIP through a formal amendment to be approved by SCAG's Regional Council.

- **AQMP-Consistent Methodology**. The methodology for analyzing emissions used AQMP consistent assumptions and modeling techniques.

- **Latest Planning Assumptions.** Technical analysis of the replacement projects was based on EMFAC 2002 emission factors and OCTAM 3.1 demographic and travel demand data.

IV Yorba Linda Station TCM Replacement

Yorba Linda Station TCM Description

The Yorba Linda Station project proposes to construct a new rail station, including 347 parking spaces for station use. The proposed Yorba Linda Station project is depicted on Maps 1 and 2.

Need for Yorba Linda Station Project Replacement. The City of Yorba Linda City Council voted, on March 16, 2004, to cancel this project. OCTA is thus seeking to replace this project before formally removing it from the RTP and RTIP.

Implication of Yorba Linda Station Project Replacement for 2004 RTP and RTIP. The Yorba Linda Station project is currently programmed as a TCM in the triennial period of the RTIP. The project is included in the 2004 RTP and 2004 RTIP as follows:

ORA 981103 In Yorba Linda, construct commuter rail station and park-and-ride (347 spaces)

The Fullerton Station project is also currently programmed in the RTIP, but is not designated as a TCM:

ORA 020113 Fullerton Train Station –Parking Structure, Phase I and II. Total of 500 spaces.

At the conclusion of the interagency consultation process, OCTA will request that SCAG amend the 2004 RTP and 2004 RTIP to remove the Yorba Linda Station project description, and designate the Fullerton Station project as a TCM. OCTA will submit the appropriate changes to SCAG by October 12, 2005, for inclusion in 2004 RTIP Amendment #10. The replacement project will be carried forward into the 2007 RTP update now being developed by SCAG.

The replacement project will also subsequently be included in annual TCM Timely Implementation Reports that SCAG submits to FHWA to demonstrate that the projects are being implemented on time in fulfillment of the AQMP TCM requirements.

Recommended Yorba Linda Station Replacement Project

OCTA proposes to use the Fullerton Station Parking Structure project as a substitution for the Yorba Linda Station 347-space parking project. The Fullerton Station Parking Structure proposes to construct a new parking facility to include 500 new spaces for transit/Metrolink station use, as located on Map1. The Fullerton project will bring about, at minimum the same air quality benefits if not more.

The Yorba Linda Station project provided only 347 parking spaces, whereas the Fullerton Station Parking Structure provides for 500 additional spaces at a well established station.

Technical Analysis

This technical analysis documents the evidence that the Yorba Linda Station replacement TCM meets the substitution criteria spelled out in the AQMP/SIP: equivalent emissions, similar geographic service area, similar implementation schedule, and demonstrated financial commitment to complete the project on time. The Yorba Linda Station TCM was modeled in conjunction with the CenterLine TCM Replacement. The modeling procedure identified below was used for both the CenterLine and Yorba Linda Station Replacement modeling.

Methodology for Analyzing Original Project and Replacement. The Yorba Linda Station TCM and the proposed Fullerton Station TCM Replacement project are compared in terms of emissions reduced. Emission reductions were calculated based on average trip lengths for those trips removed from roads as measured by utilization of the train station parking facilities. OCTA's OCTAM 3.2 travel demand model, which is consistent with SCAG's regional model, provided travel information on both TCMs. EMFAC 2002 emission factors were applied.

Emission Analysis. Based on the results of the modeling described above, Tables 1 and 2 compare the Yorba Linda Station TCM and proposed replacement TCM project emission profiles for 2010 and 2030. The Fullerton Station parking structure provides greater emission reductions than the proposed Yorba Linda Station parking facility due to the greater utilization of the Fullerton structure.

Geographic Area/Service Area/Accessibility. The replacement TCM serves the same northeast Orange County subregion as the original Yorba Linda Station TCM.

Implementation Schedule. The Fullerton Station replacement TCM will be completed and open for service by 2010, the same timeframe as the original Yorba Linda Station TCM.

Financial Commitment. The 2004 RTIP programs the Fullerton Station project with $9.3 million in city, STP-IIP and STP-RIP funds. In May 2005, the California Transportation Commission (CTC) allocated an additional $5.0 million of STIP-IIP funds to this project, for a total budget of $14.3 million. The project is now fully funded and ready to be implemented.

Table 1
2010 Comparison of Yorba Linda Station TCM and Fullerton Station Replacement TCM and Countywide Exhaust Emissions Reductions (grams per day)

	Yorba Linda Stn.	Fullerton Stn. Replacement
Parking Spaces	**347**	**500**
Parking Utilization	**59**	**332**
Park & Ride	**58**	**277**
Kiss & Ride	**1**	**55**
ROG	**-30.98**	**-174.30**
CO	**-1,318.30**	**-7,418.21**
NOX	**-71.45**	**-402.5**
PM-10	**-3.72**	**-20.92**

Table 2
2030 Comparison of CenterLine TCM and Replacement TCM Utilization and Countywide Exhaust Emissions Reductions (tons per day)

	Yorba Linda Stn.	Fullerton Stn. Replacement
Parking Spaces	**347**	**500**
Parking Utilization	**84**	**474**
Park & Ride	**83**	**395**
Kiss & Ride	**1**	**79**
ROG	**-5.88**	**-33.18**
CO	**-456.88**	**-2,578.09**
NOX	**-19.99**	**-112.81**
PM-10	**-5.29**	**-29.86**

Summary of Yorba Linda Station TCM Replacement Project Fit with Required Procedures and Criteria

- **SCAG Review and Adoption.** The replacement TCM will be presented to SCAG's Transportation and Communications Committee for its recommendation on November 3, 2005, followed by SCAG's Regional Council adoption on November 3, 2005.

- **Interagency Consultation.** Interagency consultation will occur at SCAG's publicly noticed Transportation Conformity Working Group meeting on September 22, 2005. A final interagency consultation report on the status of the replacement will occur on October 25, 2005.

- **Equivalent Emission Reductions.** The Fullerton Station replacement TCM provides greater reductions of ROG, NOx, CO, and PM-10 emissions than the original TCM.

- **Similar Geographic Area.** The replacement project serves the same northeast Orange County subregion and population as the original TCM.

- **Full Funding.** The $14.3 million project is fully funded and ready to implement.

- **Similar Time Frame.** The project will be completed by 2010, the same as the original TCM.

- **Timely Implementation.** The replacement project will be included in annual TCM Timely Implementation Reports that SCAG submits to FHWA.

- **Legal Authority.** OCTA has full legal authority to construct and operate the replacement projects; OCTA owns and operates the Metrolink track, rolling stock and station infrastructure.

- **Implementation Commitment**. The replacement project is already committed to in the 2004 RTP/RTIP.

- **AQMP-Consistent Methodology**. The methodology for analyzing emissions used AQMP consistent assumptions and modeling techniques.

- **Latest Planning Assumptions.** Technical analysis of the replacement projects was based on EMFAC 2002 emission factors and OCTAM 3.1 demographic and travel demand data.

Appendix A: Technical Documentation

Emission Model Runs

Socioeconomic Data Maps

2010 CenterLine TCM Emissions

Centerline Projects Year 2010 **Orange County Average**

Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 09/10/05 05:32:50
Scen Year: 2010 -- Model Years: 1965 to 2010
Season : Summer

	Vehicle	VMT	Starts	ROG	CO	NOX	PM10Ex	Tire W	Brake W	PM10SUM
Passenger Car	1236400	38306	7745540	15.14	142.34	11.27	0.47	0.34	0.53	1.34
Light-D-Trk1	244730	7554	1519470	4.61	39.67	3.08	0.10	0.08	0.10	0.27
Light-D-Trk2	335918	10320	2114450	4.75	47.78	5.48	0.27	0.09	0.14	0.51
Mediu-D-Trk	140753	4242	880657	2.78	25.55	3.38	0.12	0.04	0.06	0.21
Motor Cycle	31007	228	62008	1.10	8.46	0.29	0.01	0.00	0.00	0.01
L&M VEHICLE	1988808	60450	12322125	28.38	263.80	23.50	0.97	0.53	0.83	2.34
L-Heavy-D T1	20806	984	620714	0.90	3.78	2.14	0.01	0.01	0.01	0.04
L-Heavy-D T2	8220	354	205342	0.40	1.57	1.29	0.01	0.00	0.00	0.02
M-Heavy-D T	22775	1113	731434	1.22	4.50	9.08	0.22	0.01	0.02	0.25
M-Heavy-D T	14429	2057	134566	1.73	11.54	23.35	0.38	0.08	0.03	0.49
HD TRUCK	66230	4508	1692056	4.25	25.39	35.86	0.62	0.10	0.06	0.80
Line Haul V	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
School Bus	1685	62	6739	0.07	0.78	0.72	0.03	0.00	0.00	0.03
Urban Bus	1963	214	7851	0.48	4.21	2.76	0.05	0.00	0.00	0.05
Motor Home	23246	292	2326	0.13	3.57	0.58	0.01	0.00	0.00	0.01
ALL VEHICL	2081940	65528	14031100	33.32	297.74	63.43	1.67	0.65	0.91	3.23

Note :
I and M program in effect
Emissions in tones per day, VMT in 1000-miles
cline2_yi0.prn

C:\OCTAemfac\EmfacVBasic\EmfacBurden.vbp

2010 CenterLine Replacement TCM Emissions

Centerline Replacement Projects Year 2010 **Orange County Average**

Version : Emfac2002 V2.2 Apr 25 2003 ** WIS Enabled **
Run Date : 09/09/05 14:14:53
Scen Year: 2010 -- Model Years: 1965 to 2010
Season : Summer

	Vehicle	VMT	Starts	ROG	CO	NOX	PM10Ex	Tire W	Brake W	PM10SUM
Passenger Car	1235610	38281	7740550	15.13	142.21	11.26	0.47	0.34	0.53	1.34
Light-D-Trk1	244573	7349	1518490	4.61	39.64	3.08	0.10	0.08	0.10	0.27
Light-D-Trk2	335701	10313	2113080	4.75	47.74	5.47	0.27	0.09	0.14	0.50
Mediu-D-Trk	140662	4240	880089	2.78	25.52	3.38	0.12	0.04	0.06	0.21
Motor Cycle	30987	228	61968	1.10	8.46	0.29	0.01	0.00	0.00	0.01
L&M VEHICLE	1987533	60411	12314177	28.37	263.57	23.48	0.97	0.53	0.83	2.33
L-Heavy-D T1	20806	984	620714	0.90	3.78	2.14	0.01	0.01	0.01	0.04
L-Heavy-D T2	8220	354	205342	0.40	1.57	1.29	0.01	0.00	0.00	0.02
M-Heavy-D T	22775	1113	731434	1.22	4.50	9.08	0.22	0.01	0.02	0.25
H-Heavy-D T	14429	2057	134566	1.73	11.54	23.35	0.38	0.08	0.03	0.49
HD TRUCK	66230	4508	1692056	4.25	25.39	35.86	0.62	0.10	0.06	0.80
Line Haul V	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
School Bus	1685	62	6739	0.07	0.78	0.72	0.03	0.00	0.00	0.03
Urban Bus	1963	214	7851	0.48	4.21	2.76	0.05	0.00	0.00	0.05
Motor Home	23246	292	2326	0.13	3.57	0.58	0.01	0.00	0.00	0.01
ALL VEHICL	2080660	65489	14023200	33.30	297.51	63.41	1.67	0.65	0.91	3.23

Note :
I and M program in effect
Emissions in tones per day, VMT in 1000-miles
CPR_y10.prn

C:\OCTAemfac\EmfacVBasic\EmfacBurden.vbp

2030 CenterLine TCM Emissions

Centerline Projects Year 2030 **Orange County Average**

Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 09/10/05 00:54:21
Scen Year: 2030 -- Model Years: 1985 to 2030
Season : Summer

	Vehicle	VMT	Starts	ROG	CO	NOX	PM10Ex	Tire W	Brake W	PM10SUM
Passenger Car	1791910	54085	11077300	5.47	45.26	2.96	0.69	0.48	0.75	1.91
Light-D-Trk1	370215	10938	2256530	2.06	12.24	0.88	0.15	0.10	0.15	0.39
Light-D-Trk2	508206	14869	3090600	3.49	23.70	2.01	0.44	0.13	0.21	0.78
Mediu-D-Trk	213699	6201	1293260	1.74	12.96	1.15	0.19	0.05	0.09	0.33
Motor Cycle	38170	264	76332	1.10	6.40	0.31	0.01	0.00	0.00	0.01
L&M VEHICLE	2922200	86357	17794022	13.86	100.65	7.31	1.48	0.76	1.20	3.42
L-Heavy-D T1	23623	857	693472	0.91	1.69	1.16	0.01	0.01	0.01	0.03
L-Heavy-D T2	9294	362	227307	0.22	0.54	0.42	0.01	0.00	0.01	0.02
M-Heavy-D T	25807	1120	818681	0.54	2.85	1.75	0.11	0.01	0.02	0.14
M-Heavy-D T	16338	2187	102672	0.77	4.62	5.51	0.17	0.09	0.03	0.28
HD TRUCK	75062	4526	1842132	2.44	9.70	8.84	0.30	0.11	0.07	0.47
Line Haul V	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
School Bus	2163	80	8652	0.05	0.38	0.56	0.02	0.00	0.00	0.03
Urban Bus	2520	275	10080	0.23	2.22	1.85	0.04	0.00	0.00	0.04
Motor Home	35627	447	3564	0.02	0.16	0.16	0.00	0.01	0.01	0.02
ALL VEHICL	3037580	91685	19658500	16.59	113.11	18.73	1.83	0.89	1.27	3.99

Note :
I and M program in effect
Emissions in tones per day, VMT in 1000-miles
cline2_y30.prn

C:\OCTAemfac\EmfacVBasic\EmfacBurden.vbp

2030 CenterLine Replacement TCM Emissions

Centerline Replacement Projects Year 2030 **Orange County Average**

Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 09/09/05 13:57:08
Scen Year: 2030 -- Model Years: 1985 to 2030
Season : Summer

	Vehicle	VMT	Starts	ROG	CO	NOX	PM10Ex	Tire W	Brake W	PM10SUM
Passenger Car	1790750	54050	11070200	5.47	45.22	2.96	0.68	0.48	0.75	1.91
Light-D-Trk1	369976	10931	2255070	2.06	12.23	0.88	0.15	0.10	0.15	0.39
Light-D-Trk2	507877	14859	3088610	3.49	23.68	2.01	0.44	0.13	0.21	0.78
Mediu-D-Trk	213561	6197	1292420	1.74	12.94	1.15	0.19	0.05	0.09	0.33
Motor Cycle	38145	264	76283	1.10	6.40	0.31	0.01	0.00	0.00	0.01
L&M VEHICLE	2920309	86301	17782583	13.86	100.56	7.31	1.47	0.76	1.20	3.42
L-Heavy-D T1	23623	857	693472	0.91	1.69	1.16	0.01	0.01	0.01	0.03
L-Heavy-D T2	9294	362	227307	0.22	0.54	0.42	0.01	0.00	0.01	0.02
M-Heavy-D T	25807	1120	818681	0.54	2.85	1.75	0.11	0.01	0.02	0.14
M-Heavy-D T	16338	2187	102672	0.77	4.62	5.51	0.17	0.09	0.03	0.28
HD TRUCK	75062	4526	1842132	2.44	9.70	8.84	0.30	0.11	0.07	0.47
Line Haul V	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
School Bus	2163	80	8652	0.05	0.38	0.56	0.02	0.00	0.00	0.03
Urban Bus	2520	275	10080	0.23	2.22	1.85	0.04	0.00	0.00	0.04
Motor Home	35627	447	3564	0.02	0.16	0.16	0.00	0.01	0.01	0.02
ALL VEHICL	3035680	91629	19647000	16.58	113.02	18.73	1.83	0.89	1.27	3.99

Note :
I and M program in effect
Emissions in tones per day, VMT in 1000-miles
CPR_y30.prn

C:\OCTAemfac\EmfacVBasic\EmfacBurden.vbp

CenterLine TCM/CenterLine TCM Replacement Bus Emission Calculations

Bus/Train/Additional Emissions

		Tons/Day	Tons/Day
CenterLine		2010	2030
	ROG	0.00	0.00
	NOX	0.02	0.01
	CO	0.03	0.01
	PM10	0.00	0.00
	PM10-Tire	0.00	0.00
	PM10-Brake	0.00	0.00
		Tons/Day	Tons/Day
CenterLine-Replacement		2010	2030
	ROG	0.00	0.00
	NOX	0.03	0.01
	CO	0.04	0.01
	PM10	0.00	0.00
	PM10-Tire	0.00	0.00
	PM10-Brake	0.00	0.00

Yorba Linda Station TCM/Fullerton Station TCM Replacement Emissions

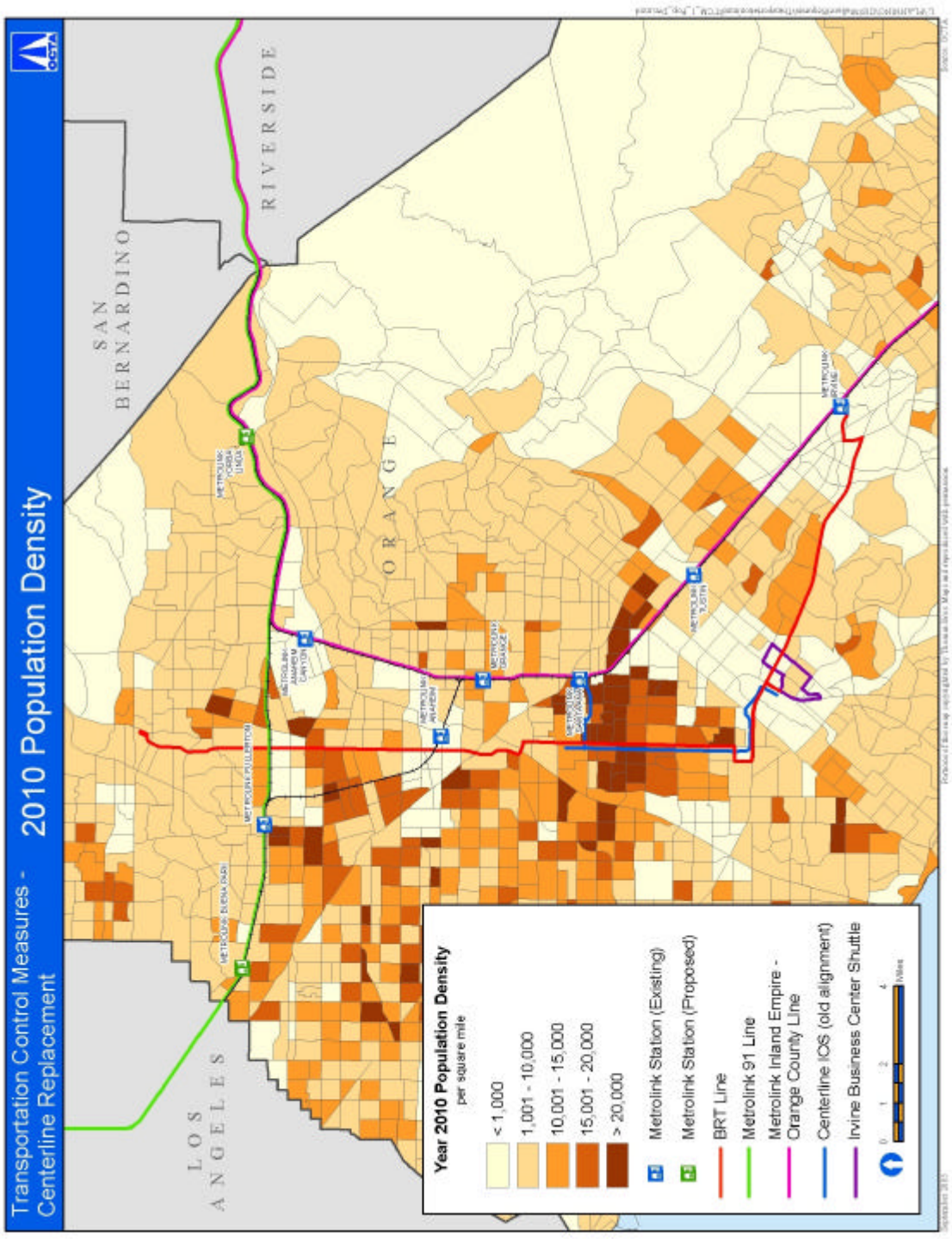
2010 Emissions Reductions by Metrolink Station (Grams/Day)

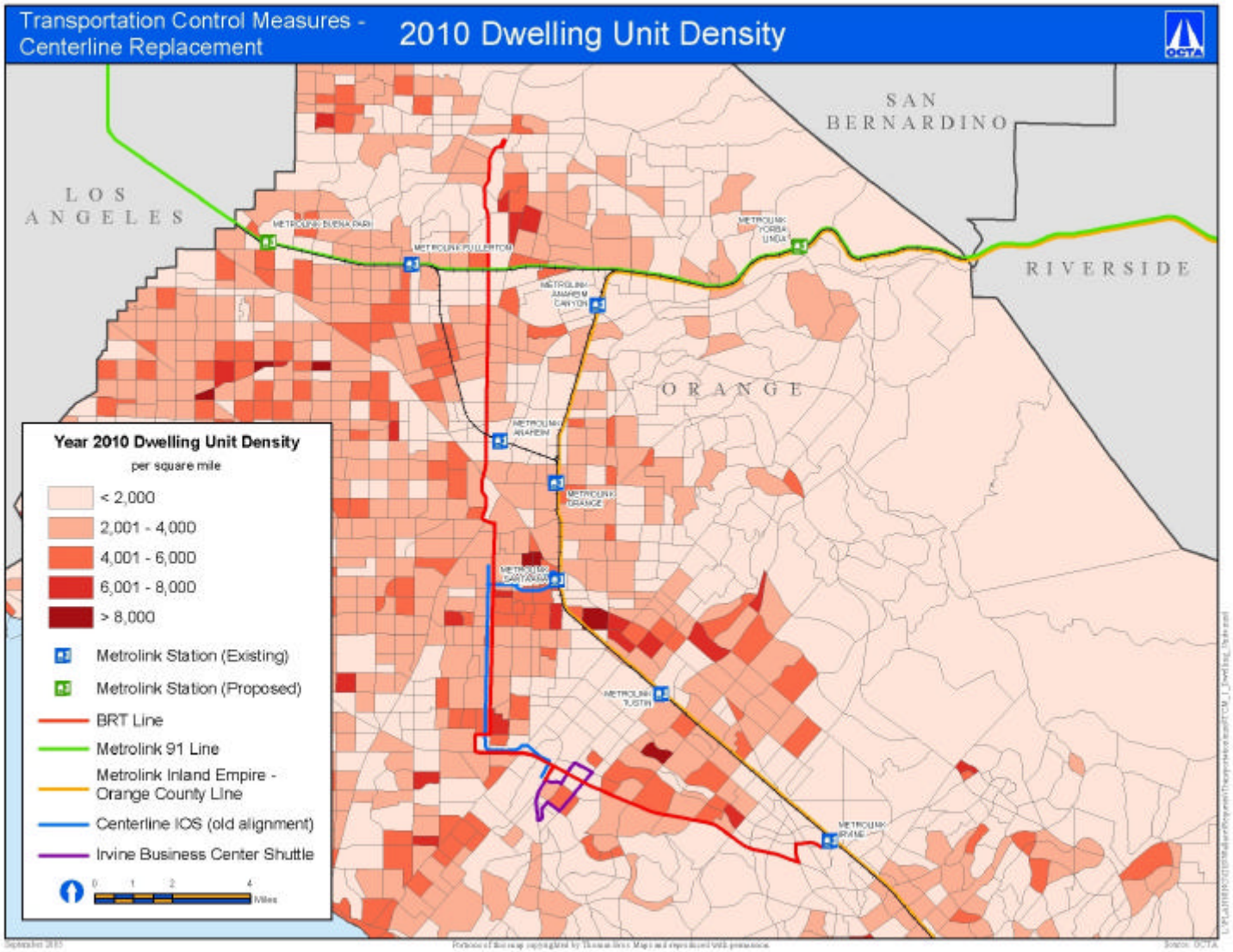
	Yorba Linda TCM	Fullerton Replacement TCM
ROG	-30.98	-174.30
NOx	-71.45	-402.05
CO	-1318.30	-7418.21
PM-10	-3.72	-20.92
PM-10 Tire	-3.30	-18.59
PM-10 Brake	-5.37	-30.21

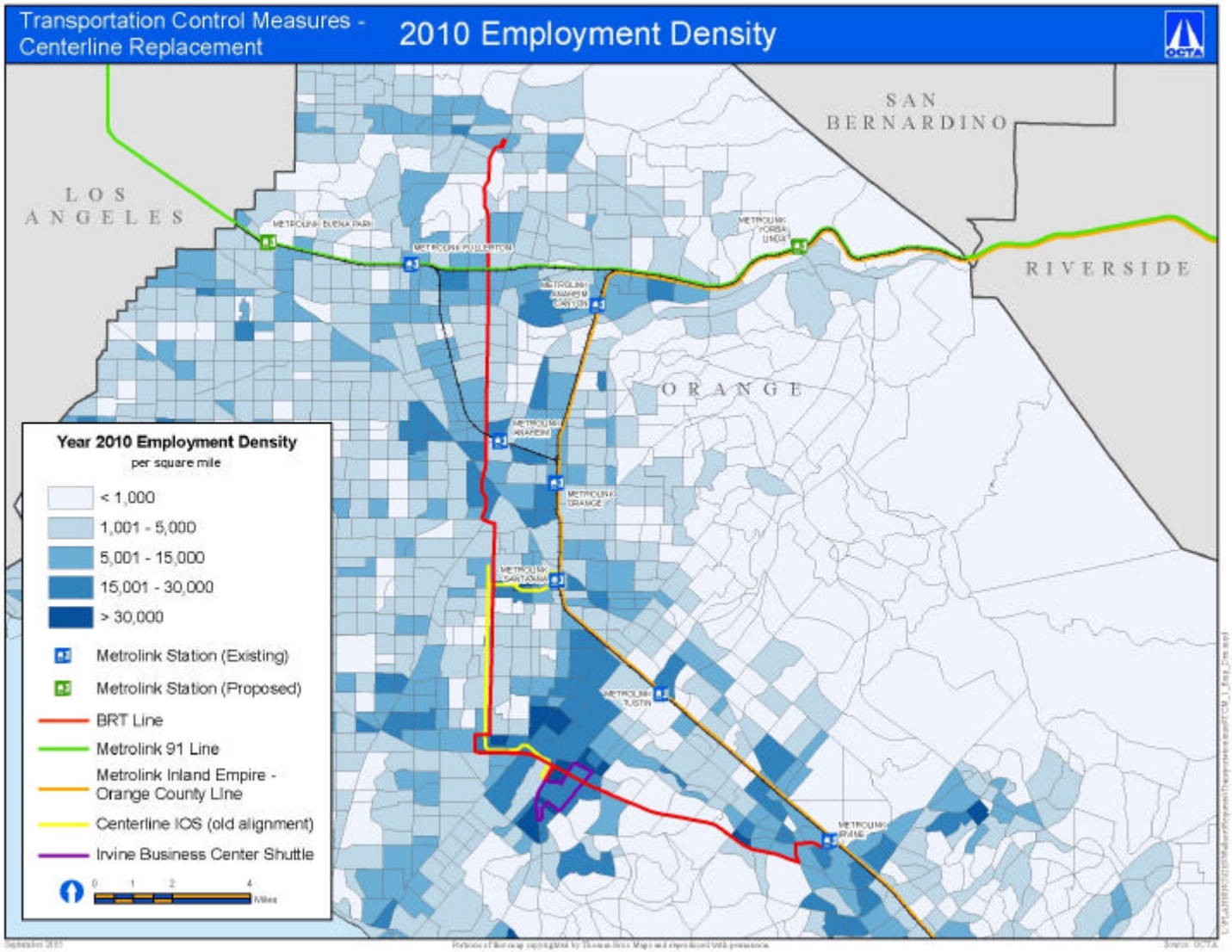
2030 Emissions Reductions by Metrolink Station (Grams/Day)

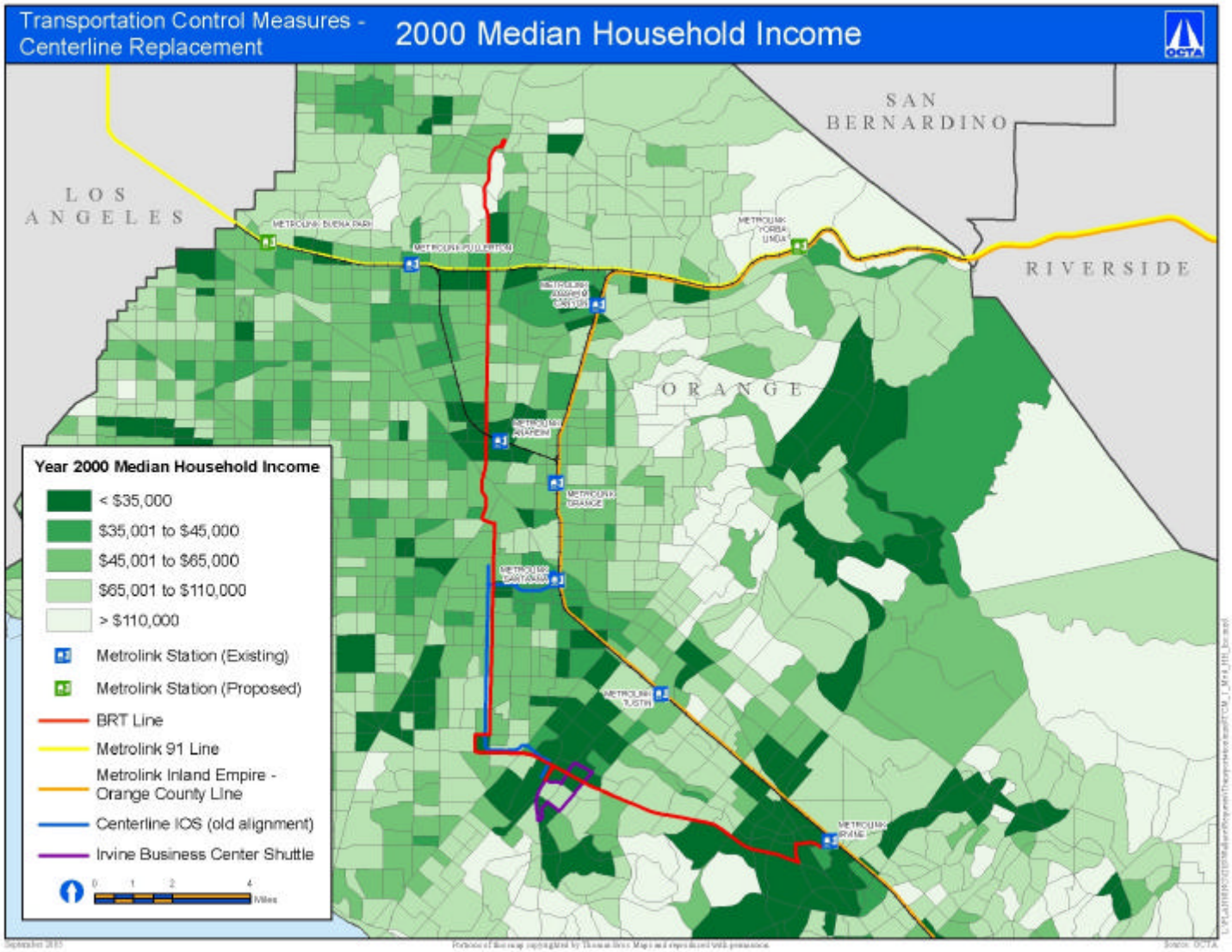
	Yorba Linda TCM	Fullerton Replacement TCM
ROG	-5.88	-33.18
NOx	-19.99	-112.81
CO	-456.88	-2578.09
PM-10	-5.29	-29.56
PM-10 Tire	-4.70	-26.54
PM-10 Brake	-7.64	-43.13

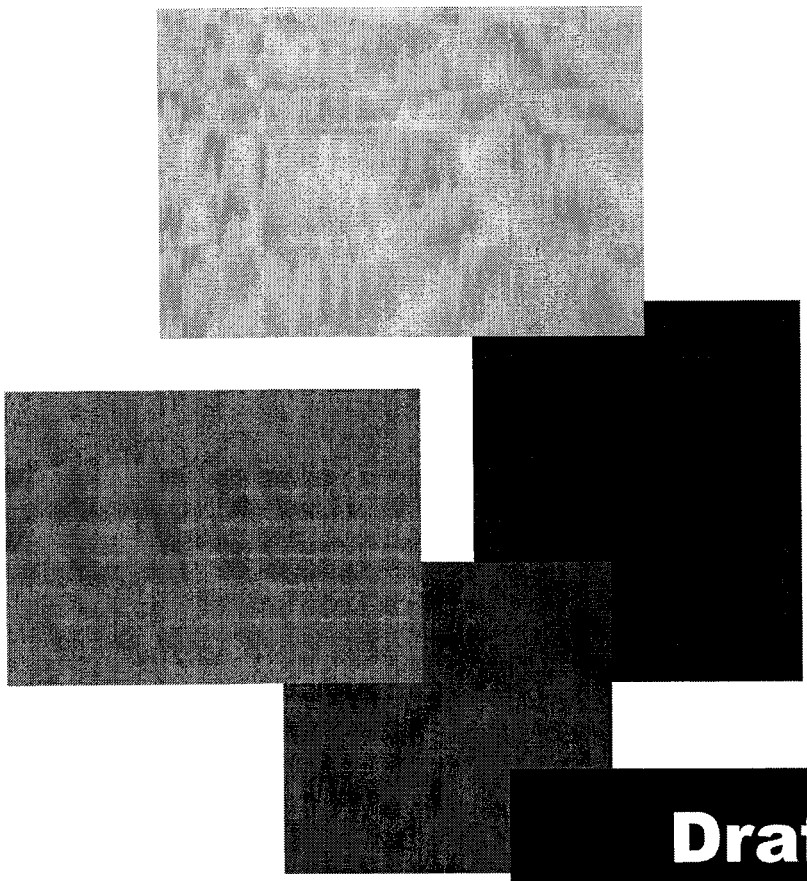
Socio-Economic Data Maps: Population, Households and Employment




Transportation Control Measures - Centerline Replacement
2010 Dwelling Unit Density
OCTA
LOS ANGELES
SAN BERNARDINO
RIVERSIDE
ORANGE
Year 2010 Dwelling Unit Density
per square mile
< 2,000
2,001 - 4,000
4,001 - 6,000
6,001 - 8,000
> 8,000
Metrolink Station (Existing)
Metrolink Station (Proposed)
BRT Line
Metrolink 91 Line
Metrolink Inland Empire - Orange County Line
Centerline IOS (old alignment)
Irvine Business Center Shuttle
0 1 2 4
Miles


Transportation Control Measures - Centerline Replacement
2010 Employment Density
OCTA
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
ORANGE
Year 2010 Employment Density
per square mile
< 1,000
1,001 - 5,000
5,001 - 15,000
15,001 - 30,000
> 30,000
Metrolink Station (Existing)
Metrolink Station (Proposed)
BRT Line
Metrolink 91 Line
Metrolink Inland Empire - Orange County Line
Centerline ICS (old alignment)
Irvine Business Center Shuttle
0 1 2 4
Miles


Transportation Control Measures - Centerline Replacement
2000 Median Household Income
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
ORANGE
Year 2000 Median Household Income
< $35,000
$35,001 to $45,000
$45,001 to $65,000
$65,001 to $110,000
> $110,000
Metrolink Station (Existing)
Metrolink Station (Proposed)
BRT Line
Metrolink 91 Line
Metrolink Inland Empire - Orange County Line
Centerline IOS (old alignment)
Irvine Business Center Shuttle
Miles



Draft Fine Particle (PM2.5) Conformity Finding

I. PREFACE

This conformity report covers all federally required analyses for the Fine Particle ($PM_{2.5}$) conformity determination for the 2004 Regional Transportation Plan (RTP) and 2004 Regional Transportation Improvement Program (RTIP). A conformity determination consists of regional emissions analyses, financial constraint test, timely implementation of Transportation Control Measures (TCMs), the use of the latest planning assumptions, appropriate documentation of findings, interagency consultation, and public involvement. The Fine Particle conformity determination reaffirms all of the applicable conformity findings for the 2004 RTP and 2004 RTIP and addresses additional analyses required for the new Fine Particle standard. Additionally, per 40 CFR 93.122(g), the conformity determination relies on the previous regional emissions analyses as developed for the RTIP/RTP for CO and PM10 and for the 8-hour ozone conformity determination approved by US Department of Transportation on May 12, 2005.

The Fine Particle standard is a new federal health-based standard for particulate pollution that is 2.5 microns or smaller (particulate matter ($PM_{2.5}$)). This new regulation requires the Southern California Association of Governments (SCAG) to receive approval from the United States Department of Transportation (US DOT) on SCAG's conformity determination on the 2004 Regional Transportation Plan (RTP) and the 2004 Regional Transportation Improvement Program (RTIP) by April 5, 2006 or the region risks a conformity lapse. Non-attainment area designations for the new fine particle ($PM_{2.5}$) standard became effective on April 5, 2005, and an approved conformity determination is required by April 5, 2006, one year after the effective date.

Conformity Status of Adopted RTP and RTIP

The adopted 2004 RTP and 204 RTIP conform to the air quality goals established by the State (air quality) Implementation Plan (SIP). Specifically, the 2004 RTP and RTIP will 1) not create new violations of the federal air quality standards, 2) not increase the frequency or severity of existing violations of the standards, and 3) not delay attainment of the standards.

The effective date for the conformity determination for the adopted 2004 RTP, including all of the air basins, is June 7, 2004, and the effective date of the federal conformity determination for the 2004 Regional Transportation Improvement Program is October 4, 2004. The conformity determination for the adopted RTP is currently effective for three years; thus, the RTP conformity will remain effective until June 7, 2007. The conformity determination for the adopted RTIP is currently effective for two years; thus, the RTIP conformity will remain effective until October 4, 2006.

The Fine Particle conformity determination does not affect the existing conformity schedule for the RTP or RTIP. However, the new federal conformity regulation for $PM_{2.5}$ requires the Southern California Association of Governments (SCAG) to make a positive conformity determination and receive approval from the United States Department of Transportation (US DOT) by April 5, 2006 or the region's conformity will lapse.

The Southern California Transportation Conformity Working Group (TCWG) discussed an efficient process to obtain an approved $PM_{2.5}$ conformity determination for the 2004 RTP and RTIP (August 23, 2005 http://www.scag.ca.gov/tcwg/), and staff presented this process to the SCAG Energy and Environment Committee on September 1, 2005. This process entails reaffirming previously approved air quality conformity analyses and findings for the 2004 RTP and 2004 RTIP and addressing additional analyses required by the new Fine Particle standard. This approach parallels the process for the 8-hour ozone conformity determination.

Proposed process for Fine Particle conformity determination on the 2004 RTP and RTIP:

1. Conduct ongoing public participation and interagency consultation throughout the process.
2. Perform regional emission analysis. $PM_{2.5}$ is a new air quality standard with no established emission budgets, and requires an *interim emissions test*. The interim emissions test requires SCAG to demonstrate that implementing the 2004 RTP and the 2004 RTIP is not expected to cause $PM_{2.5}$ emissions to exceed emissions in year 2002. This $PM_{2.5}$ conformity determination includes regional emissions analysis for direct $PM_{2.5}$ emissions and NOx as a $PM_{2.5}$ precursor. The modeling years are the 2002 baseline year and 2010, 2020, and 2030.
3. Reaffirm the existing conformity findings for the 2004 RTP and 2004 RTIP.
4. Release the draft conformity analyses and documentation for the new $PM_{2.5}$ standard in November 2005 for a 45-day comment period.
5. Hold a public hearing in December 2005.
6. Adopt the resolution making the final conformity determination in winter 2006.
7. Send SCAG's Conformity Determination to the federal agencies for approval.
8. Approval by federal agencies before April 5, 2006.

Reaffirming approved conformity findings for Ozone, PM_{10}, and CO:

The fine particle conformity determination includes a reaffirmation of the approved conformity findings for both the 2004 RTP and the 2004 RTIP. This reaffirmation includes regional emissions analyses, financial constraint test, timely implementation of Transportation Control Measures (TCMs) report, the use of the latest planning assumptions and the latest approved emissions model, and the appropriate documentation of findings, including reaffirming the process for interagency consultation and public participation.

II. FINE PARTICLE ($PM_{2.5}$) CONFORMITY REQUIREMENTS

Introduction

The Southern California Association of Governments (SCAG), the Metropolitan Planning Organization (MPO) for Southern California, is mandated to comply with all applicable federal and state transportation and air quality regulations. As stated above, the new federal conformity regulation for fine particle ($PM_{2.5}$) requires SCAG to receive approval from the United States Department of Transportation (US DOT) on SCAG's conformity determination by April 5, 2006. Non-attainment area designations for the new for fine particle ($PM_{2.5}$) standard became effective on April 5, 2005, and an approved conformity determination is required one year after

the effective date. If US DOT does not approve SCAG's determination by April 5, 2006, then the region's conformity will lapse.

Fine Particle ($PM_{2.5}$) Non-attainment Area

The South Coast Air Basin is the only $PM_{2.5}$ non-attainment area in the SCAG Region. The attainment year for $PM_{2.5}$ non-attainment areas is 2010, with a potential five year extension to 2015 (see Table 1).

Table 1: SCAG Region – Fine Particle ($PM_{2.5}$) Non-attainment Area

Non-attainment Area	Maximum Attainment Date
South Coast Air Basin (SCAB)	2010 with a possible 5 year extension to **2015**

The boundary of the South Coast non-attainment area is illustrated on the map attached at the end of this report.

Interim Emissions Test for Fine Particle ($PM_{2.5}$)

Fine particulate matter ($PM_{2.5}$) is a new air quality standard, and requires an interim emissions test. An interim emissions test is required before new emissions budgets, which establish the maximum allowable level of specific emissions for particular future years, are developed as part of the $PM_{2.5}$ Air Quality Management Plan/State Implementation Plan (SIP). The interim emissions test for $PM_{2.5}$ necessitates SCAG to run the regional transportation model and the state emissions model (Burden/EMFAC2002) for the year 2002 and for future milestone years, including 2010, 2020, and 2030. The interim emissions test employed for this $PM_{2.5}$ conformity determination is called the *baseline year test*, which entails comparing $PM_{2.5}$ emissions modeled for future milestone years to $PM_{2.5}$ emissions in baseline year 2002. In order to pass the baseline year test, SCAG is required to demonstrate that implementing the 2004 RTP and the 2004 RTIP is not projected to increase emissions of fine particles ($PM_{2.5}$) in future years above the emissions in the baseline year 2002.

The final $PM_{2.5}$ rule requires $PM_{2.5}$ non-attainment areas to consider both direct $PM_{2.5}$ emissions and significant precursor emissions. The final federal $PM_{2.5}$ rule adds $PM_{2.5}$ precursors, such as nitrogen oxides (NOx), to the transportation conformity regulations because these gases react and cool to form fine particles. Prior to the submission of the proposed $PM_{2.5}$ State Implementation Plan (SIP/Air Quality Management Plan), direct $PM_{2.5}$ emissions and NOx emissions must be considered in $PM_{2.5}$ conformity determinations. For this initial $PM_{2.5}$ conformity determination, no federal significance findings have been made to add any additional $PM_{2.5}$ precursors, although additional $PM_{2.5}$ precursors may be required for future conformity determinations after a $PM_{2.5}$ State Implementation Plan has been submitted to US EPA, if additional $PM_{2.5}$ precursors are determined to be important contributors to $PM_{2.5}$ problems in the South Coast Air Basin.

Summary of the 2004 RTP and 2004 RTIP Regional Emissions Analyses for $PM_{2.5}$

As mandated by the Conformity Rule:

- To pass the baseline year interim regional emissions test for the conformity finding, projected direct $PM_{2.5}$ emissions and NOx emissions must be less than or equal to direct $PM_{2.5}$ emissions and the NOx emissions in the baseline year 2002.

- Planning assumptions are documented in Appendix E of the 2004 RTP (p. E-28-E-42) and Technical Appendix Section II of the 2004 RTIP (p. II-5-II-17).
  * EMFAC 2002 was used for Regional Emissions Analysis.
  * Modeling networks for each milestone year are based on projects and completion dates included in Appendix I of the 2004 RTP and Technical Appendix Section II of the 2004 RTIP (beginning on p. II-60).

A summary of the regional emissions analysis (conformity findings) is tabulated below.

24-hour $PM_{2.5}$ Standard for South Coast Air Basin (SCAB)

Pollutant		2010	2020	2030
$PM_{2.5}$	Baseyear emissions	13.27	13.27	13.27
	2004 RTP/RTIP	12.49	12.07	12.71
NO_x	Baseyear emissions	722.16	722.16	722.16
	2004 RTP/RTIP	423.34	193.52	126.16

Regional emissions generated using EMFAC 2002. To pass, RTP/RTIP emissions must be equal or less than baseyear emissions.

Annual $PM_{2.5}$ Standard for South Coast Air Basin (SCAB)

Pollutant		2010	2020	2030
$PM_{2.5}$	Baseyear emissions	4844	4844	4844
	2004 RTP/RTIP	4559	4406	4639
NO_x	Baseyear emissions	263,588	263,588	263,588
	2004 RTP/RTIP	154,519	70,634	46,048

Regional emissions generated using EMFAC 2002. To pass, RTP/RTIP emissions must be equal or less than baseyear emissions.

Conformity Determinations

SCAG has determined the following conformity findings for the 2004 RTP and 2004 RTIP under the required federal tests for the new fine particle ($PM_{2.5}$) standard:

Regional Emissions Tests

- Finding: SCAG's 2004 RTP/RTIP regional emissions for direct $PM_{2.5}$ and NOx are less than the baseline year 2002 for the 24-hour and the annual standard in the South Coast Air Basin.

Reaffirmation of 2004 RTP/RTIP Conformity Tests

- Finding: SCAG reaffirms the applicable conformity findings for both the 2004 RTP/RTIP, which can be found at:

  http://www.scag.ca.gov/rtp2001/2004draft/techappendix/FinalTechAppend.htm
  and:
  http://www.scag.ca.gov/RTIP/final04/Sec1.pdf.

- This reaffirmation covers the findings for all applicable pollutants, including regional emissions analyses, financial constraint test, timely implementation of Transportation Control Measures (TCMs) report, applying the use of the latest planning assumptions and the latest approved emissions model, reaffirming consistency between the adopted 2004 RTIP and the adopted 2004 RTP, and reaffirming the process for interagency consultation and public participation.

Inter-agency Consultation and Public Involvement Test

Finding: In addition to reaffirming the already conducted public involvement and interagency consultation test for the 2004 RTP/RTIP, the fine particle ($PM_{2.5}$) conformity determination will undergo an appropriate process for interagency consultation and public participation. This process includes Transportation Conformity Working Group consultations on August 23, 2005 October 25, 2005, and December 27, 2004; Energy and Environment Committee updates on September 1, 2005, November 3, 2005 and January 5, 2006; and will brief Subregional Coordinators. A 45-day public comment period announcement is expected to be posted on the SCAG website on Monday, November 7, 2005. Copies of the $PM_{2.5}$ Conformity Determination packet will distributed to twelve regional libraries. A formal Public Hearing will be held at SCAG's offices on January 5, 2006. This event will be advertised in several regional newspapers by Wednesday November 30, 2005, including the Imperial Valley Press, La Opinion, Long Beach Press Enterprise, Los Angeles Times, Orange County Register, San Bernardino Sun, Riverside Press-Enterprise, and Ventura Star.

REGIONAL EMISSIONS ANALYSES

SOUTH COAST AIR BASIN (SCAB)

The South Coast Air Basin (SCAB) covers the urbanized portions of Los Angeles, Orange, Riverside, and San Bernardino counties, and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

PARTICULATE MATTER 2.5 – 24 HOUR EMISSIONS

	YR 2002	YR 2010	YR 2020	YR 2030
2004 RTP/RTIP	**N/A**	**12.49**	**12.07**	**12.71**
Exhaust	10.48	9.5	8.83	9.19
Tire Wear	0.83	0.9	0.98	1.08
Brake	1.97	2.1	2.25	2.44
Total $PM_{2.5}$ Exhaust	13.27	12.49	12.07	12.71
Baseyear Emissions	**13.27**	**13.27**	**13.27**	**13.27**
Difference (plan – baseyear)	N/A	-0.78	-1.20	- 0.56

Conformity finding requirement: $PM_{2.5}$ plan emissions must be equal or less than baseyear.

PARTICULATE MATTER 2.5 –ANNUAL EMISSIONS

	YR 2002	YR 2010	YR 2020	YR 2030
2004 RTP/RTIP	**N/A**	**4559**	**4406**	**4639**
Exhaust	3825	3468	3223	3354
Tire Wear	303	329	358	394
Brake	719	767	821	891
Total $PM_{2.5}$ Exhaust	4844	4559	4406	4639
Baseyear Emissions	**4844**	**4844**	**4844**	**4844**
Difference (plan – baseyear)	N/A	-285	-438	-205

Conformity finding requirement: $PM_{2.5}$ plan emissions must be equal or less than baseyear.

OXIDES OF NITROGEN – 24 HOUR EMISSIONS

	YR 2002	YR 2010	YR 2020	YR 2030
2004 RTP/RTIP	**N/A**	**423.34**	**193.52**	**126.16**
Baseyear Emissions	**722.16**	**722.16**	**722.16**	**722.16**
Difference (plan – baseyear)	N/A	-298.82	-528.64	-596

Conformity finding requirement: $PM_{2.5}$ plan emissions must be equal or less than baseyear

OXIDES OF NITROGEN – ANNUAL EMISSIONS

	YR 2002	YR 2010	YR 2020	YR 2030
2004 RTP/RTIP	**N/A**	**154,519**	**70,634**	**46,048**
Baseyear Emissions	**263,588**	**263,588**	**263,588**	**263,588**
Difference (plan – baseyear)	N/A	-109,069	-192,954	-217,540

Conformity finding requirement: $PM_{2.5}$ plan emissions must be equal or less than baseyear.

SUMMARY OF EMISSIONS ANALYSIS OF ADDITIONAL CRITERIA POLLUTANTS

In addition to the regional emissions analysis for $PM_{2.5}$, below is a summary of the regional emissions analysis for additional criteria pollutants in the SCAG region. For more detailed tables, see Technical Appendix Section II of the 2004 RTIP (p. II-11 to II-59). All emissions are in tons per day.

South Coast Air Basin (SCAB)

Nitrogen Dioxide (NOx) -Winter

NOx	YR 2005	YR 2010	YR 2020	YR 2030
BUDGET	686.000	686.000	686.000	686.000
2004 RTIP	613.664	448.827	205.602	132.970

Conformity finding requirement: the NOx emissions must be equal or less than emission budgets.

Carbon Monoxide (CO) – Winter

CO	YR 2005	YR 2010	YR 2020	YR 2030
BUDGET	3,361.000	3,361.000	3,361.000	3,361.000
2004 RTIP	2,597.739	1,809.900	859.679	529.757

Conformity finding requirement: the CO emissions must be equal or less than emission budgets.

Particulate Matter Less Than 10 Microns (PM10) – Annual Average

ROG	YR 2006	YR 2010	YR 2020	YR 2030
BUDGET	251.000	251.000	251.000	251.000
2004 RTIP	245.350	189.074	106.433	72.495
NOx				
BUDGET	549.000	549.000	549.000	549.000
2004 RTIP	534.144	418.005	192.723	125.728
PM10				
BUDGET	166.000	166.000	166.000	166.000
2004 RTIP	165.927	163.375	161.520	163.893

Conformity finding requirement: the ROG, NOx, and PM10 emissions must be equal or less than emission budgets.

Ozone – Summer

Ozone Precursor ROG (VOC)	YR 2005	YR2008	YR 2010	YR 2020	YR 2021	YR 2030
BUDGET	263.000	216.000	155.000	155.000	155.000	55.000
2004 RTP/RTIP	258.467	212.754	151.339	107.230	173.636	73.127
NOx						
BUDGET	546.000	546.000	352.000	352.000	352.000	352.000
2004 RTP/RTIP	542.271	453.459	349.304	184.282	173.636	120.819

Conformity finding requirement: RTP/RTIP emissions must be equal or less than budget

Mojave Desert Air Basin (MDAB)

(San Bernardino County portion of MDAB excluding Searles Valley)

Particulate Matter Less Than 10 Microns (PM10) – Annual Average

PM10	YR 2005	YR 2010	YR 2020	YR 2030
2004 RTIP No-Build	7.875	9.066	10.966	13.262
2004 RTP Plan	7.837	8.843	10.889	13.046

Conformity finding requirement: the Plan scenario's emissions must be equal or less than the No-Build scenario's emissions.

Western Mojave Desert Air Basin (MDAB)

Ozone – Summer

Ozone Precursor ROG	YR 2005	YR 2007	YR 2010	YR2020	YR 2030
BUDGET	21.900	19.100	19.100	19.100	19.100
2004 RTP/RTIP	18.800	16.436	13.330	7.690	6.340
NOx					
BUDGET	56.000	52.100	52.100	52.100	52.100
2004 RTP/RTIP	52.510	48.38	41.750	19.310	4.360

Conformity finding requirement: RTP/RTIP emissions must be equal or less than budget

Salton Sea Air Basin (SSAB) – Coachella Valley

Particulate Matter Less Than 10 Microns (PM10) – Annual Average

PM10	YR 2006	YR 2010	YR 2020	YR 2030
Budget	10.900	10.900	10.900	10.900
2004 RTIP Plan	9.168	9.484	10.044	10.671

Conformity finding requirement: the PM10 emissions must be equal or less than emission budgets.

Ozone - Summer

Ozone Precursor ROG (VOC)	YR 2005	YR2007	YR 2010	YR 2013	YR 2020	YR 2030
BUDGET	4.600	4.100	4.100	4.100	4.100	4.100
2004 RTP/RTIP	4.310	3.906	3.361	2.867	2.234	1.838
NOx						
BUDGET	12.300	11.100	11.100	11.100	11.100	11.100
2004 RTP/RTIP	12.008	11.016	9.305	7.623	4.913	3.460

Conformity finding requirement: the Build emissions must be less than the No-Build emissions

Salton Sea Air Basin (SSAB) – Imperial County

Particulate Matter Less Than 10 Microns (PM10) – Annual Average

PM10	YR 2005	YR 2010	YR 2020	YR 2030
2004 RTIP No-Build	5.577	6.339	8.306	10.252
2004 RTIP Plan	5.574	6.334	7.798	9.610

Conformity finding requirement: the Plan scenario's emissions must be equal or less than the No-Build scenario's emissions.

Ozone - Summer

Ozone Precursor ROG (VOC)	YR 2005	YR 2010	YR2020	YR 2030
No build (Baseline)	8.850	7.230	5.630	5.720
Build (Plan)	8.845	7.220	5.610	5.690
NOx				
No-Build (Baseline)	12.725	11.800	8.881	7.810
Build (Plan)	12.720	11.790	8.880	7.790

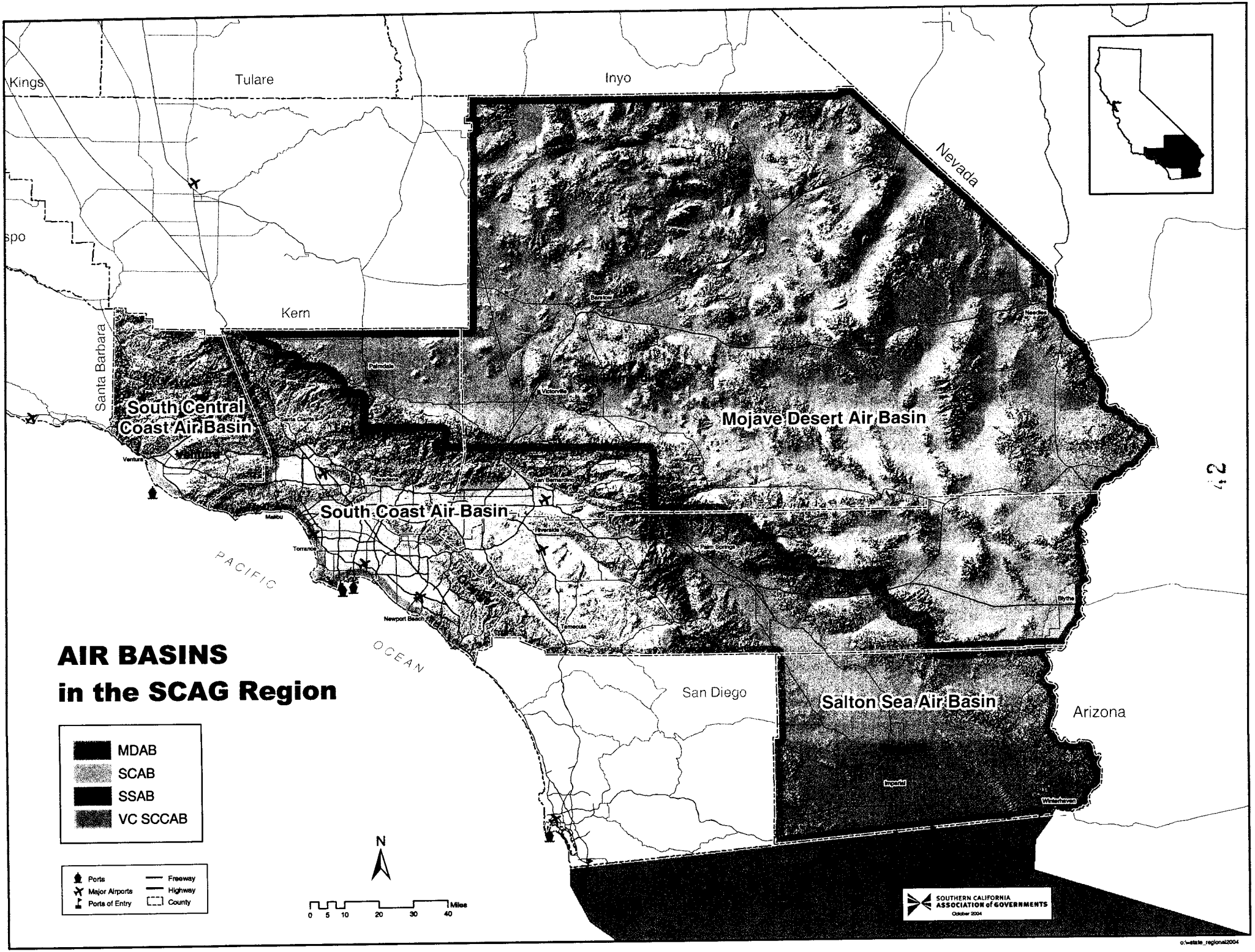
Conformity finding requirement: the Build emissions must be less than the No-Build emissions

Ventura County – South Central Coast Air Basin (VC/SCCAB)

Ozone – Summer

Ozone Precursor ROG	YR 2005	YR 2010	YR2020	YR 2030
BUDGET	14.300	14.300	14.300	14.300
2004 RTP/RTIP	14.180	10.670	6.160	4.170
NOx				
BUDGET	21.400	21.400	21.400	21.400
2004 RTP/RTIP	21.190	15.170	6.800	4.350

Conformity finding requirement: RTP/RTIP emissions must be equal or less than budget


Kings
Tulare
Inyo
Nevada
Kern
Santa Barbara
South Central Coast Air Basin
Mojave Desert Air Basin
South Coast Air Basin
Salton Sea Air Basin
San Diego
Arizona
PACIFIC OCEAN
AIR BASINS
in the SCAG Region
MDAB
SCAB
SSAB
VC SCCAB
Ports
Major Airports
Ports of Entry
Freeway
Highway
County
N
0 5 10 20 30 40
Miles
SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS
October 2004
o:\estate_regional2004